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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/579,670

02/01/2007

Yoshihiro Hashimoto

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NIXON PEABODY LLP - PATENT GROUP
1100 CLINTON SQUARE
ROCHESTER, NY 14604

EXAMINER

NAVARRO, ALBERT MARK

ART UNIT

PAPER NUMBER

1645

MAIL DATE

DELIVERY MODE

06/26/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/579,670	Applicant(s) HASHIMOTO ET AL.	
	Examiner Mark Navarro	Art Unit 1645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 4-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>multiple</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I, claims 1-3, in the reply filed on April 24, 2009 is acknowledged.

Claim Rejections - 35 USC § 112

1. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claim is vague and indefinite in the recitation of measuring the growth potential of a soil microorganism by measuring the differences in a decrease or rate of decrease of output electric current. One of skill in the art would be unable to determine the metes and bounds of the claimed invention. For instance, how is growth potential correlated with the decrease of electric current? Does a decrease of electric current signify favorable or unfavorable growth conditions? Applicants claim is silent as to how measuring the decrease of electric current relates to the preamble objective of measuring growth potential.

2. Claims 2-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1645

The claims are vague and indefinite in the recitation of "significantly higher." One of skill in the art would be unable to determine the metes and bounds of the term. For instance, what percentage increase is necessary for a "significantly higher" response (e.g., 100%, 50%, 20%, etc). Similarly at what level is the increase "not significantly higher" (e.g., 1%, 5%, 10%, etc). Without a clear definition of the term "significantly higher" one of skill in the art would be unable to determine the metes and bounds of the claimed invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by Hashimoto et al.

The claims are drawn to a method for measuring the growth potential of a soil microorganism in a soil, comprising the steps of (a) contacting a soil suspension of a soil to be measured with multiple sensors, each of which comprise a unit comprising an oxygen electrode, a housing section that stores a soil microorganism, and an immobilizing member, wherein the housing section of each sensor stores a different soil

Art Unit: 1645

microorganism; and measuring the differences in a decrease or rate of decrease of output electric current for each of the sensors.

Hashimoto et al (IDS filed 5/18/06 Ref 5) disclose a method for measuring the growth potential of a soil microorganism in a soil, comprising the steps of (a) contacting a soil suspension of a soil to be measured with multiple sensors, each of which comprise a unit comprising an oxygen electrode, a housing section that stores a soil microorganism, and an immobilizing member, wherein the housing section of each sensor stores a different soil microorganism; and measuring the differences in a decrease or rate of decrease of output electric current for each of the sensors as evidenced by the International Search Report.

NOTE: Applicants have not provided an English language translation or a copy of the cited reference. Accordingly, the Examiner is relying on the finding of the International Searching Authority. Applicants are requested to provide a copy of the cited reference for the Examiner's consideration in the next Office Action.

4. Claims 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by Hashimoto et al.

The claims are drawn to a method for measuring the growth potential of a soil microorganism in a soil, comprising the steps of (a) contacting a soil suspension of a soil to be measured with multiple sensors, each of which comprise a unit comprising an oxygen electrode, a housing section that stores a soil microorganism, and an immobilizing member, wherein the housing section of each sensor stores a different soil

Art Unit: 1645

microorganism; and measuring the differences in a decrease or rate of decrease of output electric current for each of the sensors.

Hashimoto et al (IDS filed 5/18/06 Ref 6) disclose a method for measuring the growth potential of a soil microorganism in a soil, comprising the steps of (a) contacting a soil suspension of a soil to be measured with multiple sensors, each of which comprise a unit comprising an oxygen electrode, a housing section that stores a soil microorganism, and an immobilizing member, wherein the housing section of each sensor stores a different soil microorganism; and measuring the differences in a decrease or rate of decrease of output electric current for each of the sensors as evidenced by the International Search Report.

NOTE: Applicants have not provided an English language translation or a copy of the cited reference. Accordingly, the Examiner is relying on the finding of the International Searching Authority. Applicants are requested to provide a copy of the cited reference for the Examiner's consideration in the next Office Action.

5. Claims 1-3 are rejected under 35 U.S.C. 102(a) as being anticipated by Nogyo.

The claims are drawn to a method for measuring the growth potential of a soil microorganism in a soil, comprising the steps of (a) contacting a soil suspension of a soil to be measured with multiple sensors, each of which comprise a unit comprising an oxygen electrode, a housing section that stores a soil microorganism, and an immobilizing member, wherein the housing section of each sensor stores a different soil

Art Unit: 1645

microorganism; and measuring the differences in a decrease or rate of decrease of output electric current for each of the sensors.

Nogyo (IDS filed 5/18/06 Ref 7) disclose a method for measuring the growth potential of a soil microorganism in a soil, comprising the steps of (a) contacting a soil suspension of a soil to be measured with multiple sensors, each of which comprise a unit comprising an oxygen electrode, a housing section that stores a soil microorganism, and an immobilizing member, wherein the housing section of each sensor stores a different soil microorganism; and measuring the differences in a decrease or rate of decrease of output electric current for each of the sensors as evidenced by the International Search Report.

NOTE: Applicants have not provided an English language translation or a copy of the cited reference. Accordingly, the Examiner is relying on the finding of the International Searching Authority. Applicants are requested to provide a copy of the cited reference for the Examiner's consideration in the next Office Action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Navarro whose telephone number is (571) 272-0861.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Mondesi can be reached on (571) 272-0956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1645

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Navarro/
Primary Examiner, Art Unit 1645
June 24, 2009